

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

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Claim 1 (currently amended): ~~Process for therapeutic treatment of~~ A method for treating a proliferative diseases, ~~characterized in that first~~ disease comprising placing an administration catheter ~~is placed~~ on the site of ~~the~~ a lesion, and administering a radioactive substance is ~~administered~~ topically via the catheter, ~~then to the site of the lesion, followed by removing the~~ catheter ~~is removed~~, and the radioactive substance ~~remains~~ remaining on the site of the lesion.

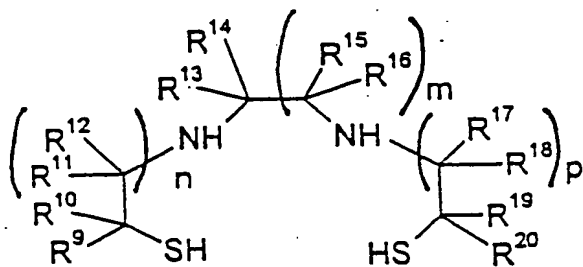
B2 Claim 2 (currently amended): ~~Process for therapeutic treatment of~~ A method for treating an arteriosclerotic diseases, ~~wherein first an administration catheter is placed on the site of the~~ lesion, and a radioactive substance is administered topically via the catheter, ~~then the catheter~~ is removed, and the radioactive substance remains on the site of the lesion disease comprising placing an administration catheter on the site of a lesion, and administering a radioactive substance topically via the catheter to the site of the lesion, followed by removing the catheter the radioactive substance remaining on the site of the lesion.

Claim 3 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a metal complex.

Claim 4 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a metal complex, ~~whose~~ that has a ligand which is a bis-amine-oxime ~~derivative of general~~ compound of formula I,



Claim 5 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a metal complex, ~~whose~~ that has a ligand which is an N<sub>2</sub>S<sub>2</sub> derivative of general compound of formula II,

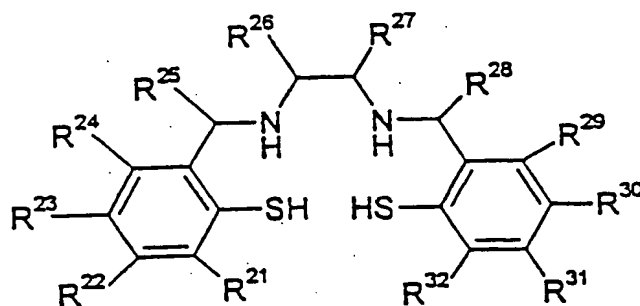


(II),

~~whereby~~ wherein  $R^9$  to  $R^{20}$  are the same or different and ~~in each case stand for~~ are a hydrogen atom, ~~and/or for~~ an unbranched, branched, cyclic or polycyclic  $C_1$ - $C_{100}$  alkyl,  $C_1$ - $C_{100}$  alkenyl,  $C_1$ - $C_{100}$  alkynyl,  $C_1$ - $C_{100}$  aryl,  $C_1$ - $C_{100}$  alkylaryl ~~and/or or~~  $C_1$ - $C_{100}$  arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, ~~and/or~~ iodine, ~~atoms~~ ~~and/or~~ hydroxy, oxo, carboxy, aminocarbonyl, alkoxy carbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, ~~and/or and~~ optionally is interrupted and/or substituted by one or more heteroatoms selected from the series N, P, As, O, S, and Se, and ~~whereby~~ wherein radicals  $R^{11}$  and  $R^{12}$ ,  $R^{13}$  and  $R^{14}$ ,  $R^{15}$  and  $R^{16}$ , ~~as well as~~ and/or  $R^{17}$  and  $R^{18}$  together optionally ~~can stand for~~ are an oxygen atom, and n, m and p, independently of one another, mean 1 or 2,

and ~~whose~~ wherein the compound of formula II contains a central atom that is a radionuclide of ~~the elements~~ an element of atomic ~~numbers~~ number ~~27, 29-32 29, 30, 31, 32, 37-39 37, 38, 39, 42-51 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.~~

Claim 6 (currently amended): ~~Process A method~~ according to claim 1, wherein the radioactive substance is a metal complex, ~~whose~~ that has a ligand which is an  $N_2S_2$  ~~derivative~~ of ~~general~~ compound of formula III,



(III)

whereby wherein  $R^{21}$  to  $R^{32}$  are the same or different and ~~in each case stand for~~ are a hydrogen atom, ~~and/or for~~ an unbranched, branched, cyclic or polycyclic  $C_1$ - $C_{100}$  alkyl,  $C_1$ - $C_{100}$  alkenyl,  $C_1$ - $C_{100}$  alkynyl,  $C_1$ - $C_{100}$  aryl,  $C_1$ - $C_{100}$  alkylaryl ~~and/or or~~  $C_1$ - $C_{100}$  arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, ~~and/or iodine, atoms and/or~~ hydroxy, oxo, carboxy, aminocarbonyl, alkoxy carbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, ~~and/or and~~ optionally is interrupted and/or substituted by one or more heteroatoms selected ~~from the series~~ N, P, As, O, S, and Se, and ~~whose~~ wherein the compound of formula III contains a central atom that is a radionuclide of the elements an element of atomic numbers number 27, ~~29-32~~ 29, 30, 31, 32, 37-39 37, 38, 39, 42-51 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 7 (currently amended): ~~Process A method~~ according to claim 4, wherein a central atom, ~~which is selected from the group is~~  $^{99m}\text{Tc}$ ,  $^{186}\text{Re}$ ,  $^{188}\text{Re}$ ,  $^{67}\text{Cu}$ ,  $^{90}\text{Y}$  ~~and or~~  $^{107}\text{Ag}$ , ~~contains the metal complex that is used.~~

Claim 8 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a metal complex, ~~whose~~ that has a ligand which is a porphyrin derivative compound.

Claim 9 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a thallium compound of isotopes isotope  $^{201}\text{Tl}$ ,  $^{207}\text{Tl}$ ,  $^{209}\text{Tl}$  ~~and or~~  $^{210}\text{Tl}$ .

Claim 10 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is  $^{201}\text{TlCl}$ .

Claim 11 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a tetrofosmin derivative compound.

Claim 12 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a sestamibi derivative compound.

Claim 13 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a furifosmin derivative compound.

Claim 14 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is a colloidal solution with particle sizes of between 5 and 1000 nm.

Claim 15 (currently amended): ~~Process~~ A method according to claim 1, wherein the radioactive substance is  $^{99\text{m}}\text{Tc}$ -tin colloid or  $^{186}\text{Re}$ -tin colloid.

Claim 16 (currently amended): ~~Process~~ A method according to claim 1, wherein the catheter that is used is a microporous balloon catheter.

Claim 17 (currently amended): ~~Process~~ A method according to claim 1, wherein the catheter that is used is a multichamber balloon catheter.

Claims 18-21 (cancelled)

Claim 22 (currently amended): ~~Use of colloidal solutions for the production of agents for the treatment of proliferative diseases,~~ A method according to claim 14, wherein the colloidal solution is labeled with a radionuclide ~~of elements~~ that is selected from Ag, As, At, Au, Ba, Bi, Br, C, Co, Cr, Cu, F, Fe, Ga, Gd, Hg, Ho, I, In, Ir, Lu, Mn, N, O, P, Pb, Pd, Pm, Re, Rh, Ru, Sb, Sc, Se, Sm, Sn, Tb, Tc ~~or~~ and Y.

Claim 23 (currently amended): ~~Use of colloidal solutions~~ A method according to claim 22, wherein the colloidal solution is labeled with a radionuclide that is selected from ~~the group~~  $^{99m}\text{Tc}$ ,  $^{186}\text{Re}$ ,  $^{188}\text{Re}$ ,  $^{67}\text{Cu}$ ,  $^{90}\text{Y}$ ,  $^{153}\text{Sm}$ ,  $^{160}\text{Tb}$ ,  $^{162}\text{Tb}$ ,  $^{198}\text{Au}$  and  $^{107}\text{Ag}$ .

Claim 24 (currently amended): ~~Use of colloidal solutions~~ A method according to claim 22, wherein the ~~colloid~~ colloidal solution is ~~produced~~ prepared by a redox reaction in the presence of a radioactive salt.

Claim 25 (currently amended): ~~Use of colloidal solutions~~ A method according to claim 22, wherein the ~~colloid~~ colloidal solution is ~~produced~~ prepared by changing the pH in an aqueous or alcoholic solution in the presence of a radioactive salt.

Claim 26 (cancelled)

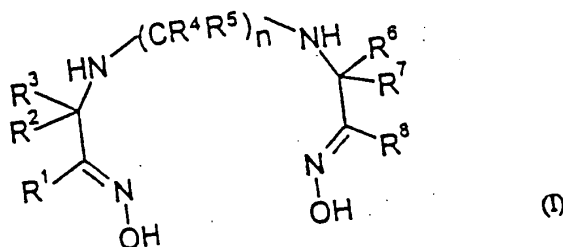
Claim 27 (currently amended): ~~Use of colloidal solutions~~ A method according to claim 22,  
wherein the particle size of the colloidal particles is between 300 and 600 nm.

Claim 28 (currently amended): ~~Use of colloidal solutions~~ A method according to claim 22,  
wherein the colloidal solution is stabilized with the aid of ~~a surfactants~~ surfactant or ~~other an~~  
~~amphiphilic substances~~ substance.

Claim 29 (currently amended): ~~Use of~~ A method according to claim 22, wherein the colloidal  
solution comprises radiolabeled sulfur colloids ~~for the production of agents for the treatment~~  
~~of proliferative diseases~~.

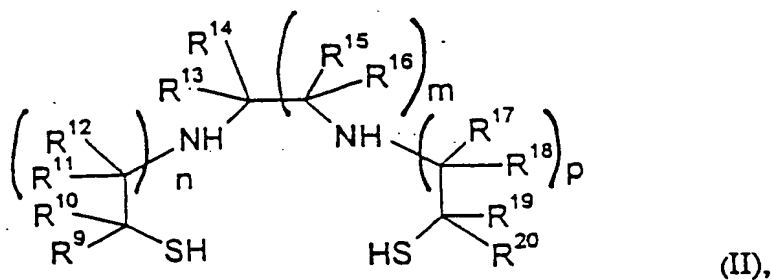
Claim 30 (new): A method according to claim 2, wherein the radioactive substance is a metal  
complex.

Claim 31 (new): A method according to claim 2, wherein the radioactive substance is a metal  
complex that has a ligand which is a bis-amine-oxime compound of formula I,



in which  $n = 0 - 3$ , and radicals  $R^1$  to  $R^8$  are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic  $C_1$ - $C_{100}$  alkyl,  $C_1$ - $C_{100}$  alkenyl,  $C_1$ - $C_{100}$  alkynyl,  $C_1$ - $C_{100}$  aryl,  $C_1$ - $C_{100}$  alkylaryl or  $C_1$ - $C_{100}$  arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals  $R^2$  and  $R^3$ ,  $R^4$  and  $R^5$ , and/or  $R^6$  and  $R^7$  together optionally are an oxygen atom, and wherein the compound of formula I contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 32 (new): A method according to claim 2, wherein the radioactive substance is a metal complex that has a ligand which is an  $N_2S_2$  compound of formula II,

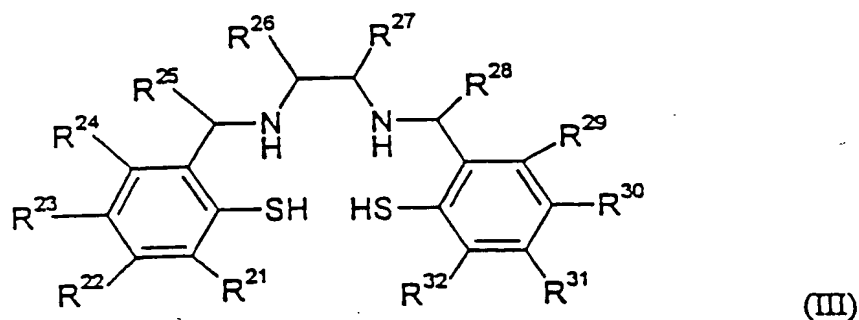


wherein  $R^9$  to  $R^{20}$  are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic  $C_1$ - $C_{100}$  alkyl,  $C_1$ - $C_{100}$  alkenyl,  $C_1$ - $C_{100}$  alkynyl,  $C_1$ - $C_{100}$  aryl,  $C_1$ - $C_{100}$  alkylaryl or  $C_1$ - $C_{100}$  arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and



wherein radicals  $R^{11}$  and  $R^{12}$ ,  $R^{13}$  and  $R^{14}$ ,  $R^{15}$  and  $R^{16}$ , and/or  $R^{17}$  and  $R^{18}$  together optionally are an oxygen atom, and n, m and p, independently of one another, mean 1 or 2, and wherein the compound of formula II contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 33 (new): A method according to claim 2, wherein the radioactive substance is a metal complex that has a ligand which is an  $N_2S_2$  compound of formula III,



wherein  $R^{21}$  to  $R^{32}$  are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic  $C_1$ - $C_{100}$  alkyl,  $C_1$ - $C_{100}$  alkenyl,  $C_1$ - $C_{100}$  alkynyl,  $C_1$ - $C_{100}$  aryl,  $C_1$ - $C_{100}$  alkylaryl or  $C_1$ - $C_{100}$  arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxy carbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein the compound of formula III contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 34 (new): A method according to claim 2, wherein the radioactive substance is a colloidal solution with particle sizes of between 5 and 1000 nm.

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